AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system for transmitting a modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

a power amplifier for amplifying the modulated radio signal in a transmission period;

a controller for generating a switching control signal; and

a switch for switching the amplified radio signal from the power amplifier between a first and a second antenna in response to the switching control signal, the switching control signal generated such that the switching occurs only in a non-transmission period of a last time slot within a sub-frame, the sub-frame includes a plurality of time slots, each time slot includes a transmission period followed by a non-transmission period,

wherein the non-transmission period of a last time slot is a non-transmission period intervening between sub-frames.

2. (Cancelled)

3. (Original) The transmission apparatus as claimed in claim 1, wherein the non-transmission period of the last time slot has a length of 96 chips.

4. (Original) The transmission apparatus as claimed in claim 1, wherein the controller disables the power amplifier at a start point of the non-transmission period of the last time slot and then outputs the switching control signal when an output level of the power amplifier is lowered to a predetermined level.

5. (Currently Amended) A transmission method in a CDMA (Code Division Multiple Access) mobile communication system for transmitting a modulated radio signal using a plurality of antennas, the transmission method comprising the steps of:

amplifying the modulated radio signal in a transmission period;

generating a switching control signal; and

switching the amplified radio signal between a first and a second antenna in response to the switching control signal, the switching control signal generated such that the switching occurs only in a non-transmission period of a last time slot within a sub-frame, the sub-frame includes a plurality of time slots, each time slot includes a transmission period followed by a non-transmission period,

wherein the non-transmission period of a last time slot is a non-transmission period intervening between sub-frames.

6. (Cancelled)

7. (Original) The transmission method as claimed in claim 5, wherein the non-transmission period of the last time slot has a length of 96 chips.

8. (Currently Amended) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system for transmitting a modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

a power amplifier for amplifying the modulated radio signal in a transmission period;

a controller for generating a switching control signal; and

a switch for switching the amplified radio signal from the power amplifier between a first and a second antenna in response to the switching control signal, the switching control signal generated such that the switching occurs only in a guard period of a last time slot within a sub-frame, the sub-frame includes a plurality of time slots, each time slot includes a transmission period followed by a guard period,

wherein the guard period of a last time slot is a guard period intervening between sub-frames.

9-10. (Cancelled)

11. (Previously Presented) The transmission apparatus as claimed in claim 8, wherein the guard period has a length of 96 chips.

12. (Previously Presented) The transmission apparatus as claimed in claim 8, wherein the guard period is a downlink non-transmission period of the sub-frame.

13. (Cancelled)

14. (Previously Presented) The transmission apparatus as claimed in claim 12, wherein the downlink non-transmission period is 875μsec.

15. (Previously Presented) The transmission apparatus as claimed in claim 8, wherein the guard period is an uplink non-transmission period of the sub-frame.

16. (Cancelled)

17. (Previously Presented) The transmission apparatus as claimed in claim 15, wherein the uplink non-transmission period is 825μsec.

18. (Currently Amended) A transmission method in a CDMA (Code Division Multiple Access) mobile communication system for transmitting a modulated radio signal using a plurality of antennas, the transmission method comprising the steps of:

amplifying the modulated radio signal in a transmission period;

generating a switching control signal; and

switching the amplified radio signal between a first and a second antenna in response to the switching control signal, the switching control signal generated such that the switching occurs only in a guard period of a last time slot within a sub-frame, the sub-frame includes a plurality of time slots, each time slot includes a transmission period followed by a guard period,

wherein the guard period of a last time slot is a guard period intervening between sub-frames.

19-20. (Cancelled)

21. (Previously Presented) The transmission method as claimed in claim 18, wherein the guard period has a length of 16 chips.

22. (Previously Presented) The transmission method as claimed in claim 18, wherein the guard period is a downlink non-transmission period of the sub-frame.

23. (Cancelled)

24. (Previously Presented) The transmission method as claimed in claim 22, wherein the downlink non-transmission period is 875μsec.

25. (Previously Presented) The transmission method as claimed in claim 18, wherein the guard period is an uplink non-transmission period of the sub-frame.

26. (Cancelled)

27. (Previously Presented) The transmission method as claimed in claim 25, wherein the uplink non-transmission period is 825μsec.

28-37. (Cancelled)

38. (Currently Amended) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system for transmitting a modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

an encoder for encoding data;

an interleaver for interleaving the encoded data;

a demultiplexer for demultiplexing the interleaved data into I channel data and Q channel data;

an I channel spreader for spreading the I channel data;

an I channel scrambler for scrambling the spread I channel data;

a Q channel spreader for spreading the Q channel data;

a Q channel scrambler for scrambling the spread Q channel data;

a time division multiplexer for time multiplexing the spread I channel data with an I channel midamble sequence, and multiplexing the spread Q channel data with a Q channel midamble sequence;

an I channel finite impulse response filter for pulse shaping the multiplexed I channel data;

a Q channel finite impulse response filter for pulse shaping the multiplexed Q channel data;

an I channel multiplier for modulating the pulse shaped I channel data;

a Q channel multiplier for modulating the pulse shaped Q channel data;

an adder for adding the modulated I channel data and the modulated Q channel data;

a power amplifier for amplifying the added I and Q channel data;

a controller for generating a switching control signal; and

a switch for switching during a non-transmission period the amplified I and Q channel data between a first and a second antenna in response to the switching control signal, the switching control signal generated such that the switching occurs only in a non-transmission period of a last time slot within a sub-frame, the sub-frame includes a plurality of time slots, each time slot includes a transmission period followed by a non-transmission period,

wherein the non-transmission period of a last time slot is a non-transmission period intervening between sub-frames.